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Weekly Bulletin

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The Public Health Nurse Views Her Crippled Children's Case Load

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As a result of the enactment of the Federal Social Security Act in 1935, a way has been provided to secure diagnosis and treatment for large numbers of crippled children who previously were denied this care. Some had been deprived because of poverty, some because this care is so costly and others because facilities were not accessible to them. Since Title V, Part II of the Social Security Act has begun to function, however, the care of crippled children has assumed increasing proportions. Now we are reading and hearing a great deal about the place of the nurse in programs for crippled children.

Probably all of us have wondered and have perhaps been a little confused by this seemingly sudden emphasis on orthopedic nursing. What is orthopedic nursing? Who is to do it? Must this nurse have special preparation?

"Orthopedic nursing is a part of all good nursing and all good nursing must be a part of orthopedic nursing." Obviously this places the responsibility of orthopedic nursing on every nurse who gives bedside care or undertakes health supervision. It also involves those who teach student nurses. It is a challenge to every nurse to contribute her part in the prevention of crippling and to assist in the restoration of the handicapped to a more meaningful and satisfying life.

What is the *place* of the nurse in programs for crippled children?

First, she may assist in the prevention of crippling conditions. Since the fall of 1936, fifty-nine diagnostic clinics have been held in various counties with the cooperation of the Crippled Children's Services of the California State Department of Public Health. Altogether, 2744 children have been examined. Of this number, 244 were reexaminations. The reexaminations are included in Chart No. I.

A little over 40 per cent of these conditions were caused by factors operative before or during birth. Strabismus cases are included in this group. They can be cared for through the same channels as crippled children. Other rather frequently found conditions are cleft lip and palate, dislocation of the hip, absent or extra bone, club feet, torticollis, cerebral palsy and obstetrical paralysis. The specific cause of a cleft lip or a spina bifida is a failure of the cells to develop properly. Causes of many other congenital conditions are not definitely known but authorities believe that various factors in hereditary tendencies, diseases of the body and mechanical disturbances of the uterus may be responsible for malformations in the embryo.

Evidently the nurse can play no part in the prevention of certain of these conditions. She may perhaps play a part through her contact with the mother during the antenatal period when she emphasizes the need for adequate medical care, the value of hygienic living and the influence of proper nutrition. She may help the mother who is infected with syphilis or gonorrhea to realize the necessity of continuous treatment.

Some abnormal conditions though not apparent at birth may be the direct result of the birth process. Cerebral spastic paralysis and obstetrical paralysis are among these. Probably some of these birth injuries might be prevented if the physicians could see the mothers early enough to make complete examinations including pelvic measurements and blood tests. The nurse's knowledge of good antepartum, intrapartum and post-partum care and her efforts to aid the mother in securing this care will help to prevent crippling conditions associated with child birth. I wish all of you could see children with cerebral palsy who have good intelligence as they struggle to express themselves. You would surely exert yourselves in behalf of good maternity care.

Studies are now being made which indicate that injury at birth may not be responsible for as many cases of cerebral spasticity as has been assumed in the past, but rather that cerebral maldevelopment may be the cause of the difficult labor so often associated with these cases. Even though this is definitely proven in the future, attention should continue to be centered on providing adequate maternity care from the standpoint of preventing other types of birth injuries.

All types of diseases were found to cause over one-fourth of the crippling conditions. In 500 case records reviewed, infantile paralysis was found to be responsible for over 15 per cent of the cases. Legs and feet were involved in 64 cases. Other diseases producing crippling conditions necessitating orthopedic care were arthritis, epiphysitis, osteomyelitis, tuberculosis and rickets.

Nurses have the opportunity to use and to teach others methods of caring for the sick which will prevent stiffness, contractures or loss of power in muscles. Dr. C. H. Crego of St. Louis says: "We do not yet know how to prevent infantile paralysis or to control the amount of paralysis in any given case, but we do know that careful splinting during the acute and convalescent stage of the disease will prevent the development of soft part contractures and bone deformities which makes up 35 per cent of our corrective surgical work."

The treatment of these children is in the hands of the doctor but they are dependent upon nurses for the manner in which the care and treatment are carried out. A pamphlet on "Care during the Recovery Period of Paralytic Poliomyelitis," Bulletin 242, may be secured from the United States Public Health Service, Superintendent of Documents, Washington, D. C., for twenty cents. Every nurse should read this for it will help her appreciate the tremendous influence of intelligent and skillful nursing care, as well as provide her with a better understanding of muscle testing and its relation to the treatment of this disease.

Extent of Problem. It has been found in the California communities from which the most reliable information is available that the number of reported cases is about 3 crippled children per 1000 general population or from 7 to 12 crippled children per 1000 under 21 years. Over 70 per cent appear in the school age group, that is from 6 to 18 years. Consider this in relation to the 40 per cent congenital or birth influenced conditions. Surely most of these conditions were apparent before the children entered school. In separating them into two year age groups it is found that the greatest number are seen for the first time in the state clinic from the twelfth to the fourteenth year.

It is not possible to demonstrate the age at which these crippling conditions occurred in these 2500 children. However, in a survey made in Chicago in 1924, it was found that 83 per cent of the cripples under 21 were crippled before the age of 6 years. This statement has definite implications for nurses working with preschool children.

The determining factor in the correction of congenital deformities is the age at which the child receives treatment. Orthopedic authorities are constantly stating that the results in the correction of congenital dislocation of the hip are inevitably better if the treatment is begun before the child is three years old regardless of the method used. Beyond that time the bony changes which take place make the end result less perfect.

Club feet are considerably more amenable to treatment if it is undertaken before the child begins to walk.

If a child with a cleft palate or lip can be placed under the supervision of a plastic surgeon immediately not only will the surgeon be able to produce a better cosmetic result but also it may be possible to prevent the formation of speech habits which are difficult to overcome later.

Disfiguring conditions whether they be birth marks, cross eyes or burn contractures if left untreated often produce psychological scars most difficult to erase. Many times, too, the type of person best fitted to assist with these children is not available. Efforts should be made to discover children before these inroads are made in their personalities.

The early location of cripples and potential cripples is the cornerstone of the attempt to lessen the number of seriously crippled children.

Nurses should be alert for limps, peculiar gaits, atrophy, weakness of a part, deformities, contractures and every evidence of a variation from a normal attitude. Especially they should train their eyes to detect differences in the newborn.

Securing a Diagnosis and Treatment. After finding the cripple it follows that the family should be assisted to use community resources to meet the needs of these children physically, educationally and socially. Only the nursing aspects of the physical care of these children is considered here.

The California Crippled Children's Act of 1927 and the Title V, Part II of the Social Security Act make it possible for every child under 21 to have a diagnosis and adequate care provided a cooperative plan can be worked out between the Crippled Children Services and the county. In diagnostic clinics children in 29 rural counties have received diagnoses and recommendations made by orthopedic specialists. Some counties have worked out their own plans for providing diagnosis and treatment for children financially unable to secure it.

Once the family has been advised of the treatment desirable, they must be assisted in making a plan for carrying out the recommendations of they need help. Very often it will be necessary to interpret to the parents in a simple, clear, understanding manner, the treatment recommended by the doctor. Many times parents delay treatment because of ignorance, prejudices based on religious beliefs or past experience and misinformation. Sometimes it is because of the confidence parents have in the nurse that they decide to carry out the recommendations.

Because of her skill in giving nursing care, the nurse has a unique opportunity to render a service in the after care of crippled children. Her teaching is more effective if she demonstrates as she talks.

What kind of orthopedic surgery are these children receiving? In the 500 cases mentioned, it was found that 46 operations on tendons and 60 operations involving bones were performed. The post-operative care of these cases is often somewhat similar. Many times they are allowed to return home in casts to remain until the casts can be removed. Mothers can be taught that the casts must be kept dry so that they will not lose their shape, the skin kept clean and no dirt or crumbs allowed to get inside of the cast. She needs to know how to bathe the child, how to turn him and how to put a bedpan under him if he is confined to bed.

Physiotherapy treatment is required for some cases after the cast is removed in order to teach the muscles to take up their old duties or to perform new functions. The program for crippled children in California has been set up so that children needing the active services of a physiotherapist are kept in treatment centers until this special care is no longer essential. When a child is returned to a rural community, the supervision he needs is of a type that can be rendered by a good public health nurse who is sincerely interested in the child's recovery.

Braces are frequently necessary for varying periods of time after surgery as well as for certain nonsurgical cases. These braces should be observed frequently to determine effectiveness and condition. Have they retained their original shape? Do they fit comfortably, are there rubbing or pressure areas? Has the child lost weight, thereby causing the brace to become loosened? Are they kept clean? Dirt and grit cause the leather to deteriorate and the movable parts to wear unnecessarily. Are they worn at night if indicated? Are the shoes in good condition? Do the straps hold the parts in place? All these questions a well trained nurse could answer for herself or teach the mother to observe.

Appliances include wedges and lifts on shoes. Rather a large part of the follow-up of diagnostic clinic patients relates to corrective shoes. The shoes must fit correctly and the wedge must be inserted according to the instructions of the orthopedist. Corrective shoes must be worn consistently if they are to accomplish their purpose.

A large number of children seen in clinics for crippled children do not require surgery or appliances. Their care is less spectacular but because of this, are they to be forgotten? If the will to develop good body mechanics can be instilled in a child, it should contribute to the development of a normal adult. Poor body mechanics may produce a variety of maladjustments.

The trends in public health programs at the present time is toward the development of staff nurses capable of rendering complete family care and health supervision. With this in mind, it is inevitable that orthopedic problems will be found in the families served. No one would debate the place of the physiotherapist orthopedic nurse in the care of conditions obviously beyond the scope of a well prepared public health nurse. Particularly is her help needed for poliomyelitis and spastic cases. However, it is apparent that for a long time to come, the staff nurses and nurses working alone in rural areas will be charged with the responsibility of providing nursing supervision for orthopedic cases.

It may not be wise to attempt to change this situation for several reasons. In the first place, it would be contrary to the objectives of generalized service in which only one nurse enters the home for health supervision; in the second place, in sparsely settled rural areas, it would be very costly to provide adequate specialized orthopedic nursing service; in the third place, it is not now possible to secure adequately prepared public health nurse physiotherapists for areas where the need for them is paramount.

Many nurses are under the impression that the follow-up of crippled children demands a body of knowledge not in possession of the public health nurse, that the term orthopedic nursing visit denotes special content and that they are incapable of instructing families in this field.

(Continued in next issue.)

MORBIDITY

Complete Reports for Following Diseases for Week Ending September 2, 1939

Chickenpox

41 cases: Albany 1, Berkeley 1, Oakland 2, San Leandro 1, Contra Costa County 1, Fresno County 1, Kings County 1, Glendale 1, Inglewood 1, Long Beach 1, Los Angeles 1, Montebello 1, Pomona 3, Santa Monica 1, Orange County 1, North Sacramento 1, San Diego County 2, San Diego 2, San Francisco 8, Tracy 1, Menlo Park 1, Santa Barbara 2, Santa Clara County 1, Palo Alto 1, Sonoma County 2, Yuba County 2.

Diphtheria

20 cases: Contra Costa County 1, Fresno County 1, Delano 1, Los Angeles County 1, Azusa 1, Inglewood 1, Los Angeles 6, Sacramento 1, San Diego 4, San Francisco 1, San Jose 1, Sonoma County 1.

German Measles

6 cases: Los Angeles County 1, Los Angeles 3, Orange County 1, San Jose 1.

Influenza

13 cases: Bakersfield 1, Los Angeles County 1, Beverly Hills 1, Long Beach 1, Los Angeles 5, Santa Monica 1, San Francisco 1, Lodi 2.

Malaria

8 cases: Glenn County 1, Kings County 2, Santa Monica 1, Tulare County 1, Yuba County 1, California 2.*

Measles

56 cases: Alameda 1, Berkeley 1, Oakland 4, Contra Costa County 1, Los Angeles County 2, Alhambra 1, Culver City 2, Glendale 1, Los Angeles 5, Pasadena 11, Merced County 1, San Jacinto 1, Ontario 1, San Diego County 1, National City 1, San Diego 12, San Francisco 5, San Luis Obispo County 1, San Mateo 1, Santa Cruz County 1, Porterville 1, Ventura County 1.

Mumps

107 cases: Alameda 1, Berkeley 4, Oakland 6, Butte County 1, Fresno County 1, Fresno 1, Kern County 6, Taft 2, Los Angeles County 3, Alhambra 1, Long Beach 2, Los Angeles 5, Pasadena 3, Santa Monica 2, Whittier 1, Signal Hill 1, Monterey County 9, Sacramento 5, San Diego 1, San Francisco 9, San Joaquin County 1, Stockton 6, Tracy 10, San Luis Obispo County 4, San Luis Obispo 1, San Bruno 2, San Mateo 2, Santa Clara County 5, Palo Alto 8, Sonoma County 1, Tulare County 3.

Pneumonia (Lobar)

38 cases: Berkeley 1, Oakland 1, Los Angeles County 3, Glendale 1, Los Angeles 19, Santa Monica 1, Madera 1, Riverside 1, Sacramento County 2, Sacramento 2, San Diego County 1, San Diego 2, San Francisco 3.

Scarlet Fever

56 cases: Oakland 1, Butte County 1, Imperial County 1, Kern County 3, Kings County 3, Los Angeles County 7, Alhambra 1, Glendale 1, Long Beach 1, Los Angeles 13, Montebello 1, Whittier 1, Brea 1, Huntington Beach 1, National City 3, San Francisco 3, San Joaquin County 8, Stockton 1, San Luis Obispo County 1, Santa Clara County 1, Palo Alto 1, San Jose 1, Tulare County 1.

Smallpox

No cases reported.

Typhoid Fever

11 cases: Fresno County 1, Kings County 2, Los Angeles 4, Sacramento County 1, Sacramento 1, San Francisco 1, Sonoma County 1.

Whooping Cough

78 cases: Alameda County 1, Albany 3, Berkeley 1, Oakland 1, Fresno 2, Los Angeles County 16, Alhambra 2, Claremont 2, Culver City 1, Long Beach 7, Los Angeles 11, Pasadena 2, Lynwood 1, Fullerton 1, Banning 5, Riverside 4, Coronado 1, La Mesa 1, National City 2, San Diego 6, San Francisco 3, San Joaquin County 2, San Jose 1, Oxnard 1, Winters 1.

Dysentery (Amoebic)

4 cases: Oakland 1, Riverside 1, San Francisco 2.

Dysentery (Bacillary)

17 cases: Fresno County 1, Kern County 1, Los Angeles County 1, Long Beach 1, Los Angeles 5, Monrovia 1, San Francisco 1, Shasta County 1, Sonoma County 5.

Leprosy

One case: Los Angeles.

Ophthalmia Neonatorum

One case: Los Angeles.

Pellagra

2 cases: Holtville 1, San Jose 1.

Poliomyelitis

61 cases: Contra Costa County 1, Martinez 1, Fresno County 3, Fresno 1, Kern County 1, Bakersfield 2, Kings County 1, Los Angeles County 7, Beverly Hills 1, El Monte 1, Glendale 1, Long Beach 2, Los Angeles 20, Santa Monica 2, Mill Valley 1, Riverside 3, San Jacinto 1, Sacramento County 1, San Benito County 1, Coronado 1, San Diego 4, San Francisco 1, Lompoc 1, Ojai 2, California 1.*

Trachoma

6 cases: Oakland 1, Fresno County 2, Los Angeles 1, Santa Ana 1, San Francisco 1.

Encephalitis (Epidemic)

7 cases: Clovis 1, Glenn County 2, Kern County 2, Bakersfield 1, Merced 1.

Paratyphoid Fever

2 cases: Alameda 1, Kern County 1.

Trichinosis

One case: Vallejo.

Food Poisoning

75 cases: Berkeley 23, Gardena 26, Monterey County 18, Stockton 1, Sonoma County 4, Tulare County 3.

Undulant Fever

6 cases: Los Angeles County 2, Pasadena 1, Merced County 1, San Francisco 1, Santa Barbara 1.

Coccidioidal Granuloma

3 cases: Fresno 2, Bakersfield 1.

Septic Sore Throat

2 cases: Santa Ana 1, Vallejo 1.

Relapsing Fever

One case: San Bernardino County.

Rabies (Animal)

10 cases: Fresno 1, Kern County 1, Los Angeles County 2, Hermosa Beach 1, Los Angeles 3, San Diego 1, San Joaquin County 1.

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* Cases charged to "California" represent patients ill before entering the state or those who contracted their illness traveling about the state throughout the incubation period of the disease. These cases are not chargeable to any one locality.

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